

252
262

5. The absorbing organ of the cotyledon (*ato*) of the nut at the *ato* stage is eaten raw (*ato mata*) with a *kinaiki* of the *ipipi* flesh that surrounds the *ato* or is baked (*ato tao*) without being removed from the shell.

6. A recipe (probably an importation from the Cook Islands) was given for *ato* *poi*. Baked *ato* is removed from the shell and pounded with the *tuki* in a *humete* until soft; then coconut liquid of the *niu mata* or *niu kalokalo* is added to the soft *ato* and the whole thoroughly mixed and eaten.

7. A dish called *yumi* was prepared in former times by allowing the flesh of a drinking nut at the *niu mata* or *niu mata* stage to rot in sea water for 8 to 10 days or until the flesh was thoroughly decayed. Coconut cream was mixed with the flesh, the whole was baked, and *yumi*, a thick, sour, creamy food resulted. Tradition states that *yumi* was the favorite food of the Yayake people when they lived on Motu Ko and was served by them with a *kinaiki* of *liboliko* talo pudding.

8. From the nut at the *yakali* or *niu papahu* stage is obtained the *ipipi*, a common *kinaiki* for fish or other foods in the absence of talo. From this *ipipi* also is made *lolo* (coconut cream). The nut is split into two and grated (*vuia*) on the grater (*tusi*). The *ipipi* is grated either finely or coarsely, depending on the excellence of the grater, whether the teeth are perfect and closely set or imperfect and irregularly spaced. To grate finely is *vaka wakailliki*; to grate coarsely, *vaka wakaipaputa*. These two types of grating are merely the characteristic results of particular *tusi* and are not related to the preparation of special dishes. It is desired at all times to avoid coarse grating: in proportion as the grating is coarse, the amount of *lolo* wrung from the gratings is less; and the finer the grating, the more the *lolo*. The gratings are picked up in the wringer of coconut husk fibers (*teuanga*) and wrung (*huhu*) into wooden bowls or coconut shells. The refuse (*ota*) left in the wringer after the oil is expressed is thrown away.

COCONUT OIL

302
[515]

Coconut oil is used as a hair beautifier and skin perfume. To rub oil into the hair is *omoomo*; to perfume the skin, *pani*. Oil was used mainly in the evening after bathing, when the day's work was finished. The three kinds of coconut oil are made as follows:

303

1. *Valikonga*: *yakali* flesh is grated and wrung out into a coconut cup; shredded leaves and flowers of sweet-scented plants are added to give fragrance; according to preference, *tala*, *nan*, *nana*, or *moile* leaves and flowers are used. The preparation is baked over night in the oven and is ready for use the next day.

2. *Yiu tuta*: *yakali* flesh is grated; leaves and flowers are added; the gratings are not wrung out but are placed in a coconut shell and exposed to direct sunlight for two or three days or until the gratings disintegrate and the oil separates; the oil is then wrung out into a shell. A hot stone previously fired in the oven is dropped into the oil, which is allowed to cool before being used.

3. *Yiu takataha tuta*: the flesh of the *takataha* nut, which can not easily be grated, is rubbed (*ato*) on the *puaga takataha* rubbing stone. Flowers are added to the rubbings and the whole is wrung out and placed in the sun until the oil disintegrates. It is then fired with a hot stone.

302
832

All types of oil are considered equally desirable. A woman makes the one she prefers. The most common is *valikonga*, as *yakali* nuts are more readily available than *takataha* nuts. The importance of oil to the Pukapukans is well brought out in the stories and chants, where the lover always makes a careful toilet with oil before leaving the house.

286
294
—

39 inches long are fastened to the netting of the hat. One end of one fringe is laid on the outside rim of the hat, passing up and over the outside apex, and down to the rim again at a point opposite the starting point. The fringe is fastened to rim, netting meshes, and apex by a continuous semit cord which makes transverse turns round fringe and points of attachment about 1 inch apart. The second fringe is applied to the hat in a similar manner, passing from rim over apex to opposite rim at right angles to the first fringe. A third length of fringe 24 inches long is fastened round the rim in a horizontal plane with a continuous semit cord. To the inside of the rim a piece of pandanus $\frac{1}{2}$ inch wide is bound with continuous turns of semit to form a hat band. Informants suggested that the more correct hat band material is *welo* bark. Two lengths of semit are tied to the apex of the hat and their ends knotted together to form a suspension loop $11\frac{1}{2}$ inches long by which the hat may be hung up when not in use. The fringe is combed out at regular intervals to prevent snarling of the fibers.

292
293
178
776
787

The priests of each lineage (*po*) wore headdresses when consulting the gods in the god houses or on the religious structures. Headdresses not in use were hung up in the god houses. The relation of the headdresses to the gods is obscure. Some thought that the headdress was worn in the Underworld by the god in question, others that a priest wore a special headdress because a certain god gave him inspiration when he was an initiate, still others that the headdress was worn only for consulting special gods. Probably all three opinions are equally correct. Some headdresses were described by informants who had seen them in their extreme youth. Gaps of memory were filled in by reference to chants. None today can make any of the headdresses of which there are no survivals on the island.

292
793
302
776
613

The headdress of priests of Muliwutu was called *sumanga*. It was also associated with the god *Te Laupepa*. Two strips of red-dyed *welo* bark (*wuti welo*), each about 2 inches wide and long enough to pass round the head, were fastened together to form a headband. At front and back between the double headband strip were fastened two pieces of turtle shell, each about 2 inches wide and from 12 to 16 inches long. The two pieces were about 5 inches apart at the base and crossed like a St. Andrews Cross.

The headdress of Matanga, Yangalipule, and Yamanaia sub-lineage, was called *polow*, and was associated with the god *Te Awaawu*. The head was oiled and the hair laid straight back flat on the head, overhanging the neck and back. A double headband of *wuti welo* bark was wound round the head. To the front of the band was fastened a single strip of turtle shell, to the tip of which was tied a large bunch of *wuti welo* streamers which fell back over the hair and onto shoulders and back.

The headband of Tua and of Matanga sub-lineage was called *sumanga pokayen kotayen* (headband of crossed frigate bird feathers). It was associated with the god *Ngaliyeyen*. It consisted of the usual *wuti welo* headband, to the front of which were fastened two frigate-bird wings crossing each other to give a fish-tail effect. An alternate headdress for priests of Tua was associated with the goddess *Tausa*. It was made of fine mesh semit netting and was termed *zupenge ye*. The headdress probably resembled the semit hat of the chief without the coconut fiber fringe. The net of the goddess *Tausa* had the virtue of rendering invisible anything over which it was cast, and also of blinding the thing hidden under it. Hence when a foreign vessel was reported off the island, the priests of *Tausa* donned their net headdresses, thus symbolizing that *Tausa* had placed her net over the whole island and that it was now invisible to the crews of the foreign canoes.

609
776

The headdress of Yalongo and Yayi lineages was called *putiki heheo*. It was associated with *Te Ana Vahua* and *Te Alongoa*. The long hair was oiled and braided

[302]

292

793

796

613

in the shape of a cone on top of the head. *Welo* bark was wrapped round the forehead, and the wrapping continued round the cone of hair to the apex. A single piece of turtle shell fastened to the headband stood up in front of the wrapped turbanlike cone. Long *wesi welo* streamers were fastened to the tip of the turtle shell, falling back over the top of the cone to blow out in the wind.

The headdress of *Yamaunga* was also called *aumanga*, but was associated with *Te Mamagatu* and *Talitonganuku*. It consisted of the *welo* headband base to the front of which was fastened a piece of turtle shell cut in a conventional representation of a fish-tail (like a Tau cross with an inverted cross member). To the cross member of this turtle-shell cross were tied *welo* streamers at four equidistant intervals. At equal spaces round the headband were fastened four strips of turtle shell, each 6 inches high. To the tip of each piece of turtle shell was fastened one *welo* streamer.

ORNAMENT AND DECORATION

301

304

Ornaments and body decorations of shell, leaves, and flowers are worn round the waist, over the shoulders, suspended from the ears and hair, on occasions when the Pukapukan man or woman feels the call to beautify the body—for formal festive occasions, or informally whenever flowers and leaves are at hand. Tattooing and body painting were unknown in Pukapuka. There are no discoverable references to them in chants or stories.

301

302

832

Almost every leaf or flower on the atoll may be worn at one time or another by man, woman, or child as a chaplet (*taumata*), necklace (*yai*), or waist decoration (*titi*). Women seldom return from the talo gardens without a few leaves or flowers stuck in their hair or fastened about the waist as a rough girdle. Men serving as guards or working in the bush always find time to make for themselves a chaplet or necklace of leaves. Children stop in their play to make themselves little foliage decorations. Young people, bound for lovers' meetings on moonlight nights, oil their bodies and hair with sweet-scented coconut oil and make themselves necklaces of *tiale* flowers.

VILLAGE DECORATIONS

292

621

293

For public festivals, such as those celebrating the winning of a sports contest, each of the three villages has its own characteristic foliage for decorative kilts, chaplets, and shoulder bandoliers. The people of Ngake make their decoration of *mako wala* (the white-heart leaves of the pandanus), *latau yili*, *taumakomaho*, or *pola puka*; the people of Loto make decorations of banana leaves (*lau woti*); the people of Yato, of coconut leaves or the *malla* fern. Decorations of these leaves are distinctive signs (*mailongo*) of the respective villages. Waist decorations (*titi*) are worn over the customary basis garment.

292

294

The *titi mako wala* (kilt of white leaves of pandanus) is made by stripping young leaves from the pandanus tree. Spikes are trimmed from each leaf and the leaf is split in two longitudinally. Each leaf is white for most of its length shading to a pale green at one end. A plain wire of prepared pandanus (*iro*) is used as a basis girdle. The worker lays the girdle on the ground, takes one leaf and fastens the green end to the

- 301 proximal end; shank (3) $3\frac{3}{4}$ inches long, $\frac{3}{4}$ inch thick at proximal end, $\frac{3}{4}$ inch thick at distal end; each shank $\frac{3}{4}$ inch wide at proximal end, $\frac{1}{2}$ inch wide at distal end; center shell (a) also of gold-lipped shell, polished smooth; greatest length $4\frac{1}{4}$ inches, greatest width $3\frac{3}{4}$ inches, thickness at hinge $\frac{3}{4}$ inch, at lip $\frac{1}{4}$ inch; at proximal end of each piece of shell two holes drilled with old-time drill, showing crater effect; necklet cord (4) of three-ply braided human hair 2 feet $11\frac{1}{2}$ inches long and averages $\frac{3}{16}$ inch in thickness; pendants fastened to necklet cord by length of braid (5) $\frac{3}{4}$ inch thick, which passes through holes and is knotted to necklet cord; pendants held apart by stretcher (6) of *ngangie* wood $6\frac{3}{4}$ inches long, $\frac{3}{4}$ inch wide, $\frac{3}{4}$ inch thick; ends of stretcher notched (7) and fastened to necklet cord by four transverse turns of fine two-ply twisted *mas* cord; turns finished off with circumferential turns between cord and stretcher. c, wooden comb (*yelu*) (C8034) with two teeth (*matatolu*) made of *ngangie* wood; $9\frac{1}{4}$ inches long; handle (1) averages $\frac{3}{4}$ inch thick; teeth $5\frac{1}{2}$ inches long, $\frac{3}{4}$ inch thick at 2, $\frac{3}{4}$ inch thick at 3. d, comb with three teeth (*matatolu*) (C8035) made of *ngangie* wood; handle round and $1\frac{1}{4}$ inches thick at 4; a pronounced shoulder (5) separates handle from short teeth (6) which are $2\frac{1}{4}$ inches long and average $\frac{3}{4}$ inch thick. e, earring (*makaveavega*) of pearl, turtle, and coconut shell (C8140); coconut-shell ring (1) $\frac{3}{4}$ inch in inner diameter and $1/16$ inch thick, cut through obliquely at 2 so that ends can be opened and slipped through hole in ear lobe; thin plate of golden pearl shell (3), attached to ring, $7/16$ inch high, less than $1/16$ inch thick; attached to lower plate of pearl shell (5) by figure-of-eight connective of black turtle shell (4) which is $5/16$ inch high, $\frac{3}{4}$ inch wide, and $1/32$ inch thick; each half of connective slit (6) so that it may be slipped onto two plates of pearl shell; lower plate of pearl shell (5) 1 inch high and less than $1/16$ inch thick.

- 301 Formerly when both sexes wore long hair, the hair was dressed with wooden combs (fig. 19, c, d). The two-pronged comb (*yelu mata lua*) was used to beat water from the hair after it had been washed; the three-pronged comb (*yelu mata tolu*) was used to arrange the hair and sweep it back before tying it together at the back of the head with a strip of pandanus. For ornamentation, the combs were often left in the hair. Though the wooden comb has gone out of use today, most women wear a trade comb as an everyday ornament.

STONWORK

- 324 Because of the absence of basaltic stone, Pukapukan stonework is limited to the use of coral (*punga*), coral conglomerate (*koupa*), and coral pebbles (*kilikili*). Stone is used for paths, seats, walls, house foundations, well facings, fishweirs, graves, religious structures, and tools.

PATHS

- 467 Paths and trails cut through the bush lead from the lagoon side to the outer beach side of the island. When they reach the outer beach, some paths are continued down to the sea and across sharp coral rubble by stepping stones of flat slabs of coral conglomerate placed over the rubble. They enable the fisherman or other visitor to the outer beach to walk to the sea without cutting his feet on the sharp stones.

643
613
782

she remained a virgin all her life and did not go through the adulthood rite. From the time she was chosen she lived in a special house called *te ualo ya o te mayakitanga* (the sacred house of the sacred maid). The induction of a *mayakitanga* was described as follows:

The sacred maid wore a pandanus kilt dyed red with the juice of *ueto* berries, a headband of *ueto* bark, also dyed red, and pearl-shell ornaments. She was placed in a horizontal position with her back to the ground, lifted high in the air on the palms of men of her lineage, and carried to the sacred enclosure of the principal god of the lineage. All the other people of the lineage, and the general populace, if it wished, followed with uplifted palms and hands. As the procession reached the enclosure they chanted the song "Kai yoid yoid", which was also chanted at the burial of a chief. At the word "UT", the girl was placed before the worshiping stone (*umu*) of the enclosure. The executive then dedicated her to the god with a prayer (*takus te vai*). No informant could remember the exact form of this prayer, but it contained reference to the increased prosperity of the island during the life of the sacred maid. Pau thought the following extract from an ancient prayer of obscure meaning was recited at this time:

Kia ² wai mudi wuin	Let the clusters of nuts be full (?)
Kia wewelo te wawa	Let the talo tubers grow big
Kia tatungitanga	(Addressing the <i>mayakitanga</i>) Beckon to the god (that he may answer this request)
Kia mataka te fia	Let the fish be numerous
Kia pi ki te tai	Let (foods) flow to the sea (in quantities from the abundance of food eaten)
Ke alo te wama	Until the land stinks
Kava ya te tangata	Countless the feasts for the people

After this prayer, the *mayakitanga* was considered dedicated to the god. She was then carried about the island on the uplifted palms of her relatives and shown to the people. Everywhere she was greeted with the remark: "Koa tauyala wai hoe ki mau" (You are making a circuit of the island—to bring us prosperity). The ceremonial tour finished, she was taken back to her house and her guarded life began.

613 The *mayakitanga* was guarded by old female relatives (*laowi* or *tawia*). She was kept inside her house for two or three months at a stretch, her skin carefully oiled so that it became exceedingly fair. She was fed the choicest foods: parts of the breast and green fat of the turtle; the *totus* part of the flesh of albacore and other large fish which stretches from the dorsal fin to the tail and contains fat white flesh; all kinds of fat fish such as *uwaiou*; and the breast meat of birds. All the skinny portions of her food supplies, lean fish, wings and legs of birds, were eaten by her *duemua*.

613 The sacred maid of the chiefly lineage of Loto lived close to the place Mataia, the other sacred maids living similarly close to their cemeteries. 643 From the residence of the *mayakitanga* to the lagoon beach was a specially cleared path called *yiwaga alo* (not to be confused with *yiwaga wuali*, cleared paths built as symbols of deified ancestors). This path was *tapu* to commoners save at times once every two or three months when the maid walked on it to show herself (*makayama*) to the populace. Then the commoners

² Koa, an obsolete particle used in proffering requests to the god.

[195]

775 more correct name would be *yelo mauhi*. Many informants were repeatedly questioned about this soul trap, separately and together, and all agreed that Gill must have confused a bird trap or bird noose which he saw hanging to a tree with the story he heard of the *matapili* noose in the Underworld. One type of bird noose, *yelo manu* (fig. 4.b), consisted of loops of semmit suspended from a *puka* tree. It is significant that Gill talks about a birdlike representative of a soul passing into the *ere vaerua*. It is likely, I think, that in order to blacken the past, a convert made for Gill what he said was a soul trap. From the old chant, "Maka taku kupu ko te tonoaanga", informants quoted the following phrases to confirm their point that the noose was used in the Underworld only:

186

539

Na yeloa ko te talakelake
Wakawiri ake te mauhi, kua mate, kua
elo
Wakatanili ai tana i te pu o te puka a
Tangi,
Wakaulu ko te wale pontini . . .

You were tied to the *talakelake* tree
(Your) soul was tangled (in the trap),
died, stank,
We were both thrown to the foot of the
puka tree of Tangi,
Entered the house of a thousand posts
(the house of Leva) . . .

If the soul trap was really an instrument of witchcraft, as Gill was assured, then it acted through the force of suggestion. The priest did not work over the insect or bird that passed through the noose with incantations in order to provoke sickness or death.

789

754

Several informants were questioned on different occasions as to their knowledge of black magic. Examples of black magic in western Europe were adduced to give them confidence, but even this lead got no results. Even if informants have willfully forgotten material on sorcery which must to them smack of heathen practices, one might expect some survival of precautions directed against sorcery in the treatment of objects closely connected with the person. But the Pukapukan customs governing the disposal of objects charged with high personality tension, as compared with customs elsewhere in Polynesia, where fear of sorcery led to rigorous tapus or the disposal of such objects, indicate that there was extremely little fear of sorcery in Pukapuka:

754

514

302

The sea took care of adult excreta, and of most child excreta; no precautions are taken today to dispose of excreta of children too young to go to the sea. Adults expectorate anywhere. Finger and toe nails are cut anywhere; formerly they were bitten off and spat out onto the ground. According to informants, the hair was rarely cut during life, and was worn long by both sexes. Some informants said that hair clippings were buried; others said that hair was often cut from a dead person, particularly from the head of a deceased favorite child, and the hair plaited into a mato or else into a cord by which pearl-shell ornaments were hung on the breast. Formerly, if a woman's hair fell into food, the food was considered spoiled by this contact. When a tooth pained, it was pulled out, taken to the god house of the lineage and deposited there with a prayer to the god of the lineage that he send a new tooth to replace the one thus given to the god. Old clothes were burned or used as rags. Today clothes are worn to rags

262

757

292

2. [See p. 64, category 116 — anal. hyst.]

140 Deformity of the teeth was noticed in one man, about 55 years old, who possesses a double set of back teeth, presumably milk teeth and second set, growing side by side from the same gum. Two other very old men were noticed whose four front incisors inclined inward at an angle of about 45 degrees to the gum. I neglected to inquire whether this was due to accident or to the chewing of certain foods.

CARE OF THE BODY

575 Adults and children wash (*palupalu*) their faces with fresh water on awakening in the morning, pouring water into the palm of the hand and so applying it to the face. Adults generally do not bathe (*takelo*) in the sea until evening, when they have a long bath and gossip with friends. When [572] bathing in the sea by day, they now wear old clothes. Formerly a woman did not remove her kilt. After bathing she laid it out to dry and put on a spare one. Presumably men bathed in their malos. Today, as formerly, men and women bathe naked in the sea at night. A fresh-water rinse is taken after a sea bath when water is available. Coconut oil (*yinu*) was formerly always applied (*omoomo*) to the hair, face, and body after a bath to make the hair stand out and the skin shiny. Today it is applied only on special occasions, for it is not possible to spare coconuts to make sufficient oil for everyday use.

Delousing (*vakulu na wutu*) is performed at any time by a girl for another girl or older woman, by a mother for a daughter. The lice (*wutu*) are killed by chewing. Presumably it was done for men, when they wore their hair long, by wives or other female relatives, but with their hair cut short, lice apparently present no problem to them. Small boys and some girls today have their hair cut very short as a prophylactic measure against lice and scalp infection. Grey hairs (*lau ulu yina*) are sometimes pulled out of a man's head by his wife. This is termed *wuti na yina*.

302 Body hair (*wuluwulu*) on man or woman was not removed but was considered an object of great beauty. At infrequent intervals a man removed the beard from his face by sawing at it (*valuvalu*, to scrape) with a knife of the jaw bone of the *pala* fish. Today most men shave (*valuvalu*) with a razor 826 once a week before going to church. 832

Whitish blotches (*tunciana*) on the skin resulting from *tinea* infection were highly prized as making the skin more beautiful. The chants contain many references to this; a lover commonly praises the number and size of the blotches on the skin of his mistress.

514 Bodily hygiene of infants and children is discussed elsewhere (p. 276). Adults, like children, urinate (*minai*) anywhere outside the house. Adults evacuate in the sea and clean themselves with a coconut husk or a stone and